ABSTRACT

An imaging apparatus includes: a three-dimensional substrate in which a partition wall (11) having an opening (10a) at a central portion is formed so as to cross an inner cavity; an optical filter (5) that is fixed on a first flat surface (12) of both surfaces of the partition wall so as to cover the opening; a semiconductor imaging device (4) that is face-down mounted on a second flat surface (13) of the partition wall with an imaging area (4a) facing the opening; and an optical system for forming images that is installed on a side of the optical filter in the inner cavity of the three-dimensional substrate. The opening of the partition wall is closed on both sides with the optical filter and the semiconductor imaging device so as to form a cavity. An air passage (12a) for allowing communication between the cavity and an exterior of the three-dimensional substrate is formed on the first flat surface, and has a labyrinth structure that causes a flow rate of air passing through the air passage to vary depending on a location in the air passage. This allows air circulation between the exterior and a cavity enclosed by a semiconductor imaging device and an optical filter, while suppressing the entry of foreign matter from the exterior into the cavity via an airflow caused by expansion/contraction of air.

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